

Work Order ID 82624

Monday, April 30, 2012 10:47:36 AM

82624

Ship May 14th

Page 1

Item ID: D4294-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fitting
 Start Date: 4/4/2012 Start Qty: 7.00 ***7*** Cust Item ID:
 Required Date: 4/30/2012 Req'd Qty: 7.00 ***7*** Customer:
 Reference:

Approvals: Process Plan: mf Date: 12-04-30 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4294	C

100

0.00

100

BAND SAW

Bandsaw

0.00

Jeaspa Bandsaw

Memo

Cut Blank to 7.125"

Batch:

GRAIN ALONG 4"

P10.116922

CX 12-05/08 (7)

cut material at meter

0.00

110

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

0.00

HAAS CNC vertical machine #1

Memo

1-Machine per folio FB008

DWG REV: C

FOLIO REV: C

FK 12/05/08

2012.5.11

10 1

2- deburr rough edges

W/O: 82624		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4294-1 PAR #: _____ Fault Category: Machinis NCR: ☒ Yes No DQA: Aut Date: 12/05/28
12-11437 Resolution: Scrap Disposition: Scrap QA: N/C Closed: CK Date: 12/5/28

NCR:		WORK ORDER NON-CONFORMANCE (NCR) 322.15						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12-5-11	#100	Part too thin. Did not see shim on the folio dng. for last operations - R.L operator error/LOE	W 12/05/14	- Scrap + no more mat'l - High light shim on dng.	12-5-11	and 12/05/15	W 12/05/14	S 12/05/15
				Jim. drag with folio markup as CAP. (Employee works off folio only in machinery)				
				CK 12/5/24				

NOTE: Date & initial all entries

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Page 2

Item ID: D4294-1

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Fitting

Start Date: 4/4/2012 Start Qty: 7.00

7

Cust Item ID:

Required Date: 4/30/2012 Req'd Qty: 7.00

7

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

FK 12/05/08

20 10.5.11

10 1

121

0.00

121

Mill Conv

Memo

0.00

Conventional Milling Machine

DRILL & TAP FOR HELICOIL AS PER DWG

12/05/15

10 0

122

QC2- Inspect parts off machine FAI/FAIB

0.00

122

QC

Memo

0.00

Quality Control

12/05/15

10 0

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Item ID: D4294-1

Accept

N9000040100

Setup Start *NS1*

Revision ID:

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Stop *NS2*

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7

Cust Item ID:

Required Date: 4/30/2012 Req'd Qty: 7.00

7

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				10			
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				10			
145 *145* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo MASK THREADED HOLE	0.00 0.00				10 X			

Start Time : 12:10
Temp : 320°F
Finish Time : 12:40

m121134

M-L
12/05/15

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Required Date: 4/30/2012 Req'd Qty: 7.00 ***7*** Customer:
Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00				10	0	1255	
Quality Control									
151		0.00							
151									
Small Fab	Memo	0.00				10			
Small Fab	INSTALL HELICOIL AS PER DWG								
152	QC5- Inspect part completeness to step on W/O	0.00							
152									
QC	Memo	0.00							
Quality Control									

NO

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 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* Packaging Packaging	Identify as per dwg & Stock Location: 5470 Memo	0.00 0.00	MF	12-05-15					
190 *190* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							12/5/16 MF 12-05-15

Picklist Print

Monday, April 30, 2012 10:47:36 AM

Page 1

Work Order ID: 82624

Parent Item: D4294-1

Parent Item Name: Fitting

Start Date: 4/4/2012

Required Date: 4/30/2012

Start Qty: 7.00

Required Qty: 7.00

Comments: IPP REV:A NEW ISSUE 10-11-25 JLM VERIFIED BY:DD
02-15 JLM VERIFIED BY:DD

IPP REV B: AS PER REV B 11-

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21209F1-10 HELI COIL		Purchased	No				Each	62.0000					
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST304		62							
				116977		62							
M7075T73B4.000x4.000 7075-T73 Bar 4.0 x 4.0		Purchased	No			100	f	11.9215	0.6	4.4210526			

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT001	1.4055	
118201	1.4055	
MAT005	10.516	
116153	0.75	
116867	0.041	
→121246	9.725	

~~6.948~~ F.K 12/05/09.
6.948

~~116977 x1~~

Dart Aerospace Ltd

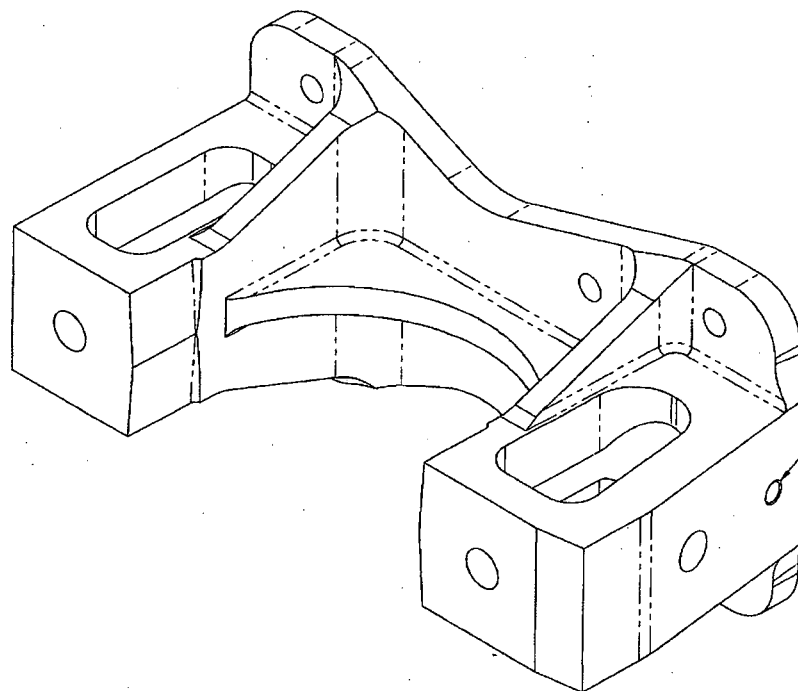
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



82624

MS21209F1-10 HELICAL COIL, 1X
REF

GRAIN
DIRECTION

D4294-1 FITTING

RELEASED
R 2011-02-01

NOTES:

- 1) MATERIAL: 7075-T73/-T7351/-T73510/-T73511 BAR
PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS 4124) OR AMS-QQ-A-250/12 (AMS 4078)
REF DART SPEC. M7075T73B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N "D4294-1" AND B/N PER DART QSI 044 6.1
- 7) WEIGHT: 1.55 lbs

C	ADD HELICAL COIL (D1-2, B4-3)	CP	11.01.14
B	0.780 WAS 0.76 (C6-2), 1.560 WAS 1.54 (C4-2)	CP	10.11.30
A	NEW ISSUE	CP	10.11.09
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.01.14		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4294	REV. C
TITLE FITTING (407 AFT)	SHEET 1 OF 3
SCALE NTS	
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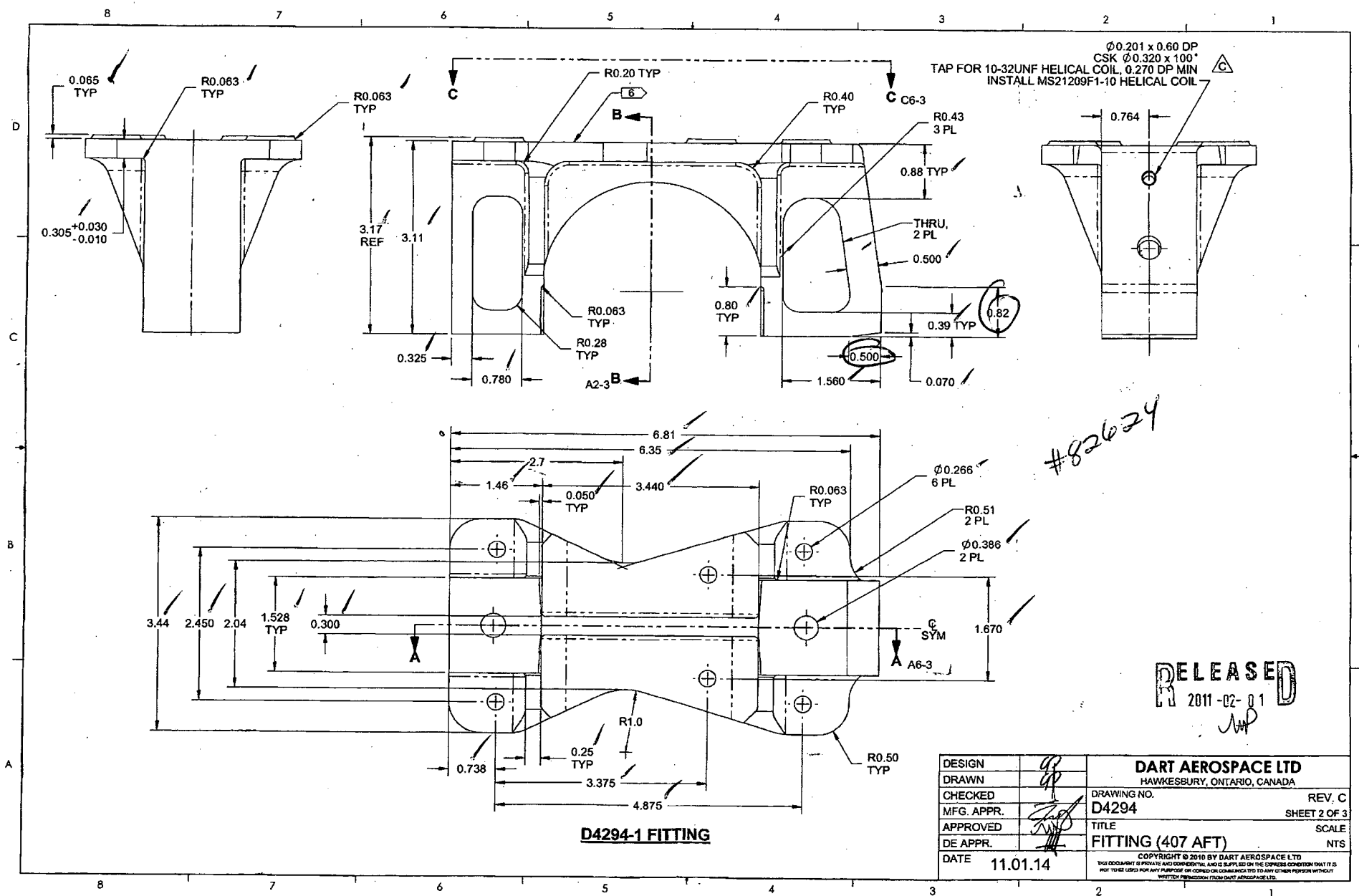
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries



RELEASED
2011-02-01

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4294	REV. C
MFG. APPR.		TITLE	SHEET 2 OF 3
APPROVED		FITTING (407 AFT)	SCALE
DE APPR.			NTS
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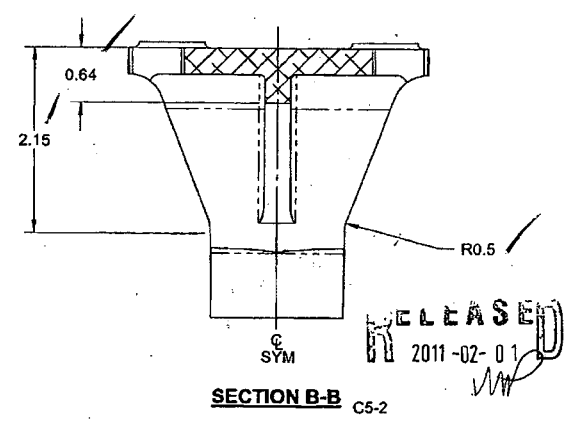
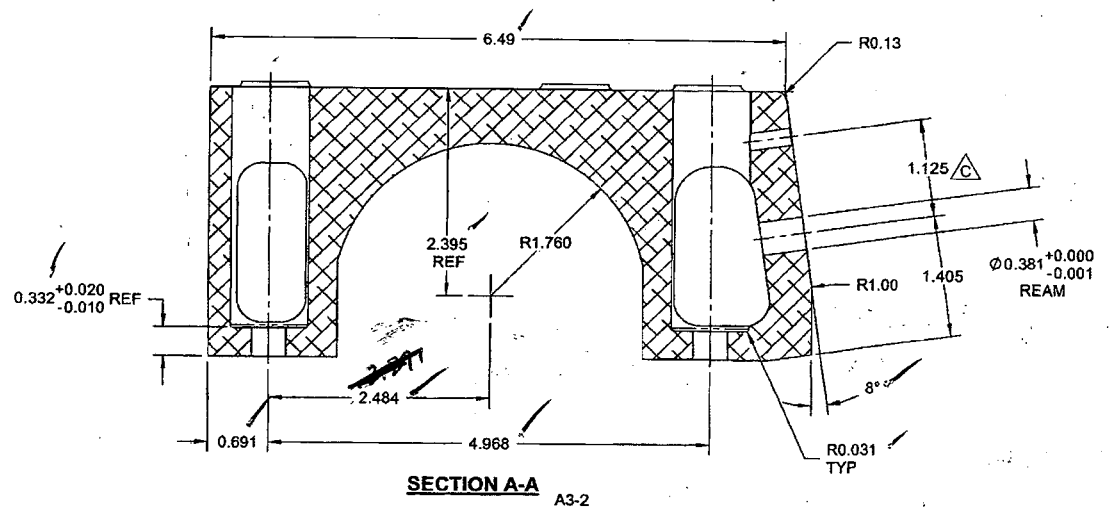
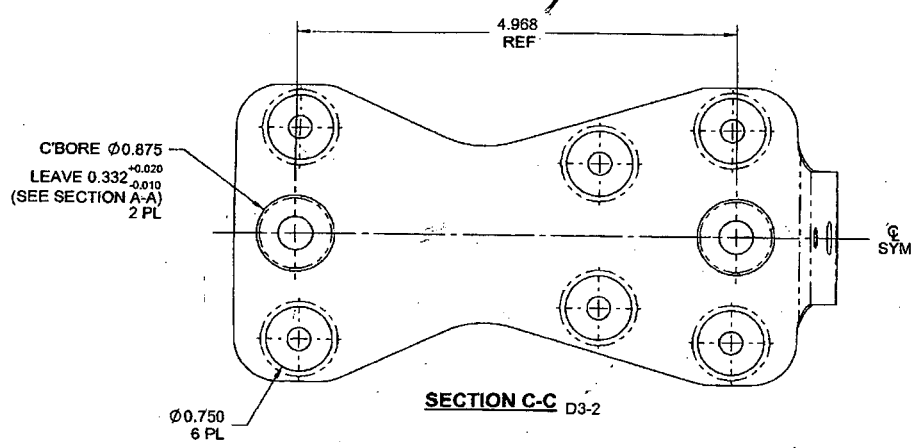
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

$2570 + (-386/2)$
 $+528$
 1.721

#82624



DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4294	REV. C
MFG. APPR.		TITLE	SHEET 3 OF 3
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 82624
Description: Fitting (407 AS)	Part Number: D4294-1
Inspection Dwg: D4294 Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.065	+/- .010	.061	✓		FK-04	Vern.
.305	+/- .010	.308	✓		"	"
R.063	+/- .030	.063	✓		rad gauge	
3.17	+/- .030	3.173	✓		FK-04	Vern.
3.11	+/- .030	3.11	✓		"	"
.325	+/- .010	.327	✓		"	"
.780	+/- .010	.778	✓		"	"
.80	+/- .030	.80	✓		"	"
1.560	+/- .010	1.562	✓		"	"
.500	+/- .010	.499	✓		"	"
.500	+/- .010	.500	✓		"	"
.070	+/- .010	.070	✓		"	"
.39	+/- .030	.392	✓		"	"
.82	+/- .030	.82	✓		"	"
.88	+/- .030	.881	✓		"	"
6.81	+/- .030	6.812	✓			
6.35	+/- .030	6.35	✓			
2.7	+/- .100	2.7	✓		FK-04	Vern.
3.440	+/- .010	3.442	✓		"	"
1.46	+/- .030	1.457	✓		"	"
3.44	+/- .030	3.44	✓		"	"
2.450	+/- .010	2.450	✓		"	"
2.04	+/- .030	2.046	✓		"	"

Measured by: FK	Audited by: <i>am</i>	Preliminary Approval:
Date: 12/05/09	Date: 12/05/15	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

DART AEROSPACE LTD		Work Order: 82624
Description: Fitting (407 Aft)		Part Number: D4294-1
Inspection Dwg: D4294 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.528	+/- .010	1.527	✓		FK-04	Vern
3.300	+/- .010	.300	✓		"	"
.738	+/- .010	.739	✓		"	"
.25	+/- .030	.25	✓		"	"
3.375	+/- .010	3.375	✓		"	"
4.875	+/- .010	4.875	✓		"	"
R.50	+/- .030	.50	✓		rad gauge	
1.670	+/- .010	1.670	✓		FK-04	Vern
Ø .386	± .006 ^{+ .006} _{- .001}	.386	✓		"	"
Ø .266	± .006 ^{+ .006} _{- .001}	.266	✓		"	"
R.51	+/- .030	.51	✓		rad gauge	
R.063	+/- .030	.063	✓		"	
Ø .875	+/- .010	.875	✓		FK-04	Vern
.332	^{+ .020} _{- .010}	.331	✓		31006	Height gauge
6.49	+/- .030	6.49	✓			
.691	+/- .010	.693	✓		FK-04	Vern
4.968	+/- .010	4.968	✓		"	"
2.484	+/- .010	2.484	✓		"	"
R 1.760	+/- .010	1.757	✓		31006	Height gauge
R.032	+/- .030	.032	✓		rad gauge	
8°	+/- .5°	8°	✓		angle gauge	
R .13	+/- .030	.13	✓		rad gauge	
.64	+/- .030	.64	✓		FK-04	Vern

Measured by: FK-	Audited by: <i>[Signature]</i>	Preliminary Approval:
Date: 12/05/09	Date: 12/05/15	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

[Signature] 10.04.15

